

ENGINEERING DIRECTIVES AND STANDARDS

Volume : III Effective Date :
Chapter : 1 Revision Date : 07/16/1976
Section : 1 Subject : **ENGINEERING SURVEYS**
Directive : 6

1. **PURPOSE.** The purpose of this directive is to establish a uniform policy for submitting survey data for use in preparation of construction plans.
2. **SCOPE.** This directive outlines procedures and a check list for submitting field surveys to insure that necessary information has been obtained.
3. **PROCEDURE.** The Department's Location & Survey Manual requires certain information to be given by field personnel when submitting survey data for use in preparation of instruction plans on highway construction projects. The requirement of this manual have been prepared as a survey checklist by the Department's Design, Location and Survey Sections.

Copy of this checklist is attached for use in preparation of field surveys which includes the necessary data that the Department must have in the preparation of final construction plans. This checklist should be utilized, excluding Item K under No. 1 and Item No. 10 which will not be applicable to all Departmental surveys.

In submitting the field information to this office, all the information contained in the checklist must be obtained.

4. **OTHER ISSUANCES AFFECTED.** All directives, memoranda or instructions issued heretofore in conflict with this directive are hereby rescinded.
5. **EFFECTIVE DATE.** This directive will be effective immediately upon receipt.

SURVEY CHECKLIST

S.P. # _____ DATE CHECKED: _____

NAME: _____ TYPE OF SURVEY: _____

ROUTE: _____ SURVEYED BY: _____

PARISH: _____

1. Field roll submitted
 - a. Identified (project no., name, route, parish, etc.)
 - b. Field Book numbers and contents on field roll
 - c. Names of utility companies
 - d. Profile shown
 - e. Cross drains in profile section
 - f. Invert elevations for cross drains
 - g. High water marks where applicable
 - h. B.M.'s shown
 - i. References to all P.O.T.'s, P.C.'s, P.I.'s, and P.T.'s
 - j. Utilities shown in proper color (also size of pipelines)
 - k. Field rolls inked
 - l. Property owners shown
 - m. Property lines shown
 - n. When an apparent property line survey is made, the property lines should be referenced to the survey line by plus and angle at the intersection of the projection of the property line and the survey line.
 - o. All curve data, P.C.'s, P.T.'s, P.I.'s, and P.O.T.'s shown
 - p. Field roll legible and containing normal topography

REMARKS

2. Field Books submitted
 - a. Identified (project no., name, route, parish, etc. on front cover - IN INK)
 - b. Pages 2 and 3 properly filled out - IN INK
 - c. Properly indexed and cross-indexed on pages 4 and 5 - IN INK
 - d. Daily weather and personnel listed at beginning of each day
 - e. Alignment and topography notes shown from bottom of page up
 - f. All curve data, P.C.'s, P.T.'s, P.I.'s, and P.O.T.'s shown
 - g. Bearings shown (type- whether magnetic or calculated)
 - h. All P.O.T.'s, P.C.'s, P.I.'s, and P.T.'s referenced (at least 3 ties for each point)
 - i. Bench level, profiles cross section books, etc. recorded properly
 - j. Books legible

REMARKS

3. Drainage and layout map submitted
 - a. Identified (project no., name, route, parish, etc.)
 - b. Survey line shown
 - c. Existing roads, railroads, and streams shown

- d. Drainage structures shown (show all structures that affect a particular drainage area; give size)
- e. Drainage areas outlined
- f. Drainage areas shown (acres or square miles)
- g. Direction of flow shown
- h. High water marks (how determined)
- i. Invert elevation for drainage structures

REMARKS

4. Structure Report forms submitted (Form 1088)

REMARKS

5. Location survey checking form submitted (Form 1150)
a) forms must be signed by Field Supervisor and Party Chief

REMARKS

6. Location Report: form submitted (Form 1087)

REMARKS

7. Utilities Form IO-006 submitted
- a. Master pole list
 - b. Elevation of buried telephone cable if in conduit (if not in conduit, use cover as stated by company representative)
 - c. Elevation and size of gas and water lines (unless District Utility Representative states specifically that it is not needed, in which case all concerned should be notified by letter)
 - d. Length of casings on cross pipelines
 - e. Angle of crossing on all cross pipelines (on pipeline, not vents)
 - f. Crossing of service lines
 - g. Water and gas lines and vents and fire hydrants
 - h. Water and gas meters (unless adjacent to house)
 - i. All columns that apply filled in

REMARKS:

8. Our copy of the letter from the Party Chief to the Headquarters Utility Engineer listing utility companies involved (be sure original letter shows distribution of copies)

REMARKS:

9. Letter from Party Chief to Utility Representative transmitting original utility list, Form 10-006 (be sure original letter shows distribution of copies)

REMARKS:

10. Centerline closure sketch submitted and checked
11. Property map submitted (only if full property survey is made)

REMARKS:

12. Parish or city map showing survey line in red, with stations shown at beginning and end of survey line; also, show project number

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